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ABSTRACT

The purpose of this paper is to present some preliminary findings on the effects of racial status, socioeconomic status (SES), and measured ability (MA) upon academic performance of students in a liberal arts college. Preliminary analyses of academic performance (cumulative grade point averages and semester-by-semester grade point averages) among black and white students by SES and Mental Ability are reported for 95 black and 263 white students from the entering classes of 1964, 1965, and 1966 at Oberlin College. Findings suggest that grades among black students are not dependent on SES or upon mental ability measures to a significant extent. Some relationship between SES and MA to grades is found in the case of white students (subsequent, unreported analyses suggest that racial status predicts to grades when SES and MA are partialled out). The systematic, mean differences in grade point averages in the earlier semesters of a student's college career (lower mean points among black students, higher mean points among white students) is associated most closely with racial status when SES and MA are controlled. It is suggested that categorical discrimination in pre-college opportunities limits the grade attainments of black students at Oberlin College. Given the selective pool of black students, their later semester grades begin to reflect on their tested potential. (Author/JM)

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THE ASSOCIATION OF RACIAL STATUS, SOCIOECONOMIC STATUS,
AND MEASURED ABILITY UPON ACADEMIC PERFORMANCE IN
A LIBERAL ARTS COLLEGE*

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THE ASSOCIATION OF RACIAL STATUS, SOCIOECONOMIC STATUS,
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Introduction

The purpose of this paper is to present some preliminary findings on the effects of racial status, socioeconomic status (SES), and measured ability (MA) upon academic performance of students in a liberal arts college. The absence of systematic, multivariate analyses including racial status in addition to the standard variables of SES and measured ability upon college attainments in higher education is in itself a chapter in the history of American higher education. It has only been since 1964 that institutions of higher learning (excluding Black colleges and universities) have increased the size and proportion of students from Black backgrounds. According to a Bureau of Census report (Current Population Reports, 1969), 434,000 Black college students were enrolled in the fall of 1968, which is an increase of 85 percent over the 234,000 enrolled in college in 1964. In 1968, these students constituted 6 percent of the total college enrollment of 6,801,000. With the increasing enrollment and presence of a wider range of Black students in both "selective" and "less selective" institutions of higher learning, systematic studies could speak to the corpus of established findings about SES and MA factors in academic performance (Sewell, Haller, and Ohlendorf 1970 and Hauser 1969). In addition, such systematic studies could serve to anchor serious policy discussions about the wisdom and effectiveness of diverse educational programs intended to increase the educational opportunities of Black and other minority students in higher education (Stanley 1971).

This report describes the pattern of association among SES and MA influences upon academic performance of Black and White students at Oberlin College. These findings serve as the basis for both methodological and substantive questions about the ability of present indicators of SES and MA to describe the life patterns and educational influences within the Black and White population. The data also speak to educational policy issues regarding selection and placement of minority students within the full range of colleges and universities in America.

Policy Concerns. It is not easy to navigate the complexities and concerns of academicians and non-academicians about both the principle of increased enrollment of minority students and about the appropriate range of institutions and educational programs which are "most suited" for such students "at their present stage of development (Stanley 1971, p.644).". The essential problem concerns the ability of selective institutions to enroll such students without having to alter both function and form in major ways:

There are social and educational justifications for admitting to a particular college some minority-group students who are marginally qualified for it academically, provided that the students are given adequate financial aid and effective remedial courses, tutoring, and coaching. However, if entrants are greatly underqualified academically, new curricula will be required. These may tend to segregate the specially admitted students from the regular student body, thereby diminishing the pacesetter role of the latter. Current demands by minority groups for "relevant" courses may reflect the academic difficulties many of their members encounter in present courses more than the educational unsuitability for them of such courses. (Stanley 1971, pp. 645-646)

Stanley further notes:

Nothing in this article should be taken to mean that I believe no persons from disadvantaging backgrounds should be in selective colleges. Clearly, some of them will be served academically, socially, and emotionally there, if despite their origins, they are not too underqualified academically. I advocate treating each

college applicant primarily as an individual, rather than a member of a group. Logically, this leads to essentially "color blind," "ethnic blind," and "region blind" admission to college, though students from disadvantaging backgrounds who are at the low end of the normally admissible applicant group can be given special consideration for admission and much educational remediation if enrolled. Admitting applicants who are quite academically underqualified for a particular college will necessitate new, easier curricula for that college, not just massive remediation and tutoring for the students. (Stanley 1971, p. 644)

It is clear that Stanley did not mean that minority students, by definition, are underqualified. And yet, the reading of his article might suggest such a perspective.

Past reports and present suggestions about minority admissions do not raise the level of policy discussions to the point that the academic community at large can understand the evidential bases for recent policy proposals. Historically, selective colleges have not reported highly positive results with "reasonably able Black students from high socioeconomic backgrounds."

Astin suggests that reasonably able Black students from high socioeconomic backgrounds who attend selective colleges persist well to graduation, even though many of them make mediocre or poor grades. Most of these students choose their respective colleges, however, rather than being recruited. Also, they had few black classmates with whom to isolate themselves from the whites or with whom to seek black courses, curricula, departments, and colleges. (Stanley 1971)

With the new range of Black students in higher education from lower SES backgrounds and with apparently lower MA scores, proposals to develop random selection procedures in admitting Black students into colleges (Astin 1969) may puzzle many readers. Data on persistence and adequate performance in college may be the basis for such a proposal, but the net effect of past and present experience and knowledge among academicians may not lead to avid support or rapid adoption of seemingly non-selective approaches to admissions among selective institutions.

The critical policy problem facing institutions of higher learning is not the principle of increasing educational opportunities among Black and other minority students. It is more of a question of where such students should receive their education, given the wide range of selective and non-selective institutions in America. This preliminary report of findings in a liberal arts college setting is made with full awareness of these policy concerns.

Past Studies. The general drift of findings about the interplay of SES and intelligence upon academic performance in pre-college settings suggests that SES effects are mediated through the effects of measured abilities on educational attainment (Sewell, Haller, and Ohlendorf 1970, and Hauser 1969). Socioeconomic background affects academic achievement primarily through its association with intelligence. Socioeconomic background influences course marks only through its effects on intelligence and previous academic achievement. Socioeconomic background and intelligence influence aspiration through their effects on course marks, membership in school organizations, and perceived parental expectations (Hauser 1969).

Sewell and Shah's findings for Wisconsin boys (Sewell and Shah 1967) indicate that both socioeconomic status and intelligence have direct effects on planning on college, college attendance, and college graduation. There also are considerable indirect effects on the level of educational attainment through their effects on college plans and college attendance. However, when only those who attended college were included in the analysis, intelligence is more important than socioeconomic status, for both sexes, in determining who eventually graduates from college (Sewell and Shah 1967; Sewell, Haller and Ohlendorf 1970). More recent data reported by Wegner and Sewell

(1970) suggest that these findings are conditioned by the kind of selective or non-selective institutions which a student attends. In "good liberal arts colleges," lower SES students, regardless of ability levels, do not persist to graduation as favorably as ⁱⁿ other kinds of higher educational settings. Financial considerations appear to be critical (Wegner and Sewell 1970, p. 678).

There is a preponderance of data available on academic performance among pre-college students. The EQUALITY OF EDUCATION survey, one of the most extensive studies of student attitudes and performance ever made suggests that the greatest proportion of the achievement differences among elementary and secondary students may be accounted for by differences in their social class backgrounds (Coleman *et. al.* 1966). Among college students very little has been research^a on the simultaneous effects of racial status, socioeconomic status, and measured ability. A few studies of/very general nature at the college level have been reported by Clark and Plotkin (1963), Bindman (1965), Bradley (1967), and others on racial status. The question of whether the standard indicators of background influences (SES and MA) will predict to academic performance among Black students in the same way they do for majority students still remains an empirical question.

Stanley's analysis suggests that there are serious methodological and substantive questions which await systematic study. On the basis of the best evidence in hand, he suggests that traditional indicators should predict similarly among Black and other minority students as they do among White students.

Test scores predict the college grades of educationally disadvantaged students at least as well as they do those of the advantaged. High school grades considerably augment the prediction for both

groups. Regardless of socioeconomic level, students who are predicted to earn quite low grades within a particular college will tend to have academic difficulties if enrolled in it. (Stanley 1971, p. 645)

Given the dearth of systematic studies, this report begins to fill this void.

Data and Findings

The data for this study were collected from records of students at Oberlin College over a six year period from the entering classes of 1964, 1965, and 1966 (The graduating classes of 1968, 1969 and 1970). The total number was 358 students. There are 95 Black students (the universe of Black students) and 263 White students. The White students in this study consist of two groups: (1) the universe of those students whose family incomes were below stipulated levels to be eligible for Federally-aided Educational Opportunity Grants (EOG) (N=125), and (2) a random sample of students within this period whose family incomes exceeded EOG levels (N=138).

Data from a private liberal arts college have more restricted generalizability than data from a large random sample selected among the nation's students. However, there are theoretically sound grounds for examining "internal" relationships within a particular type of institution. Campbell and Erlebacher suggest that compensatory education programs can best be studied in terms of a smaller sample of promising quasi-experimental studies rather than an aggregated study involving the full range of programs (such as completed in the Headstart evaluations) (Campbell and Erlebacher 1970, p. 25). Gerald Slatin's analysis of ecological and individual correlational analyses also suggest that ^{both} aggregate and smaller unit analyses are essential in obtaining interpretable results (Slatin 1971). In specific, what applies to liberal arts colleges may be highly specific to such settings (Wegner and Sewell 1970) and findings that Stanley cites by Eckland and others (Stanley 1971) may be specific to major university settings.

The college from which this sample was drawn provides an excellent setting for a study of this type. Archival data is accurately kept for an extended period of time. Moreover, the college has a diversified program of scholarships, grants, and loans which enables it to bring a cross-section of students from all regions in the country. Oberlin also established a special opportunity program to recruit Black students (and other minority students) in 1964. Based on internal review of Black student performance as well as national experience, two changes in selection criteria were made: (1) Changes in SAT levels and (2) Changes in the types of schools and apparent levels of preparation among these admitted students. Approximately 100 points separate the average score of these Black students from the SAT scores of the White students (See Table 1). The students also are recruited from public high schools, usually in central urban settings.

Although the findings from this study may not be representative of the nation's students, it certainly can be argued that the results from this investigation should hold for many private and public colleges of a similar nature throughout the country. Since the 1970's should bring increased opportunities for many black students to obtain education that is offered by the so-called prestigious colleges, a study of this kind should be very helpful in evaluating present admission policies in selective institutions.

The variables used in this analysis are socioeconomic status (SES) based on the father's occupational status as rated by Duncan and others (Robinson, et. al. 1969), measured ability (MA) based on Scholastic Aptitude Tests in Verbal and Mathematical Aptitudes (CEEb 1969) and academic performance, based on both semester by semester and cumulative

grade point averages on a thirteen point scale. (F = 0.00; D- = 0.67; D = 1.00; D+ = 1.33; C- = 1.67; C = 2.00; C+ = 2.33; B- = 2.67; B = 3.00; B+ = 3.33; A- = 3.67; A = 4.00; A+ = 4.33)

The mean scores for SES, MA, and GPA's for all three groups are reported in Tables 1, 2, and 3.

Tables 1, 2, and 3 about here

The mean scores for SES, MA, and GPA's for Blacks, white E.O.G. and the random white sample of students were as follows (Table 1). For black students, the mean scores on SAT Verbal and Mathematical measures are 556 and 543 respectively (N=84). Their mean score on the Duncan Socio-Economic Index is 48.5 (N=76) (Table 2). Forty-six percent of the Black students qualified for EOG assistance and an additional 41% of the students received some form of financial assistance. Thirteen percent of the Black students received no financial aid. The cumulative Grade Point Averages for Blacks at the end of the first year was 2.05; second year, 2.17; third year 2.32; fourth year, 2.41 and their cumulative average was 2.41 (Table 3).

The mean score on SAT Verbal and Math for the White E.O.G. students is 641 and 649 respectively (N=96) (Table 1). The mean score on the Duncan Socio-Economic Index is 45.5 (N=100) (Table 2). The Grade Point Averages for the white E.O.G. students at the end of the first year was 2.60, second year, 2.66; third year, 2.73; fourth year 2.85; and cumulative average was 2.91 (Table 3).

The mean score on SAT Verbal and Math for the White Random sample of students is 643 and 645 respectively (Table 1). The mean score on the Duncan Socio-Economic Index is 74.0 (N=124) (Table 2). Fifty-four

percent of these students received some form of financial aid, although less in amount than among the EOG background students. Forty-six percent received no aid. The Grade Point Averages for the White Random sample group at the end of the first year was 2.56; second year 2.70; third year 2.78; fourth year 2.90; and their cumulative average was 2.93 (Table 3).

In terms of educational attainment (academic performance) we find an analysis of grades from semester to semester to be more useful than observing cumulative performance. In viewing differences in cumulative grade point averages, differences and fluctuations tend to be evened out. On the other hand, an analysis of semester by semester grade point averages tend to reveal a different picture. A semester by semester analysis gives full weight to later, higher achievement. Cumulative averages punish those who have experienced academic difficulty at some time in their career (Figures I and II)

Figures I and II about here

This is particularly applicable for Black students; in terms of grades they are the ones who flounder the most, but they are also the ones to make the greatest improvement. In contrast, White E.O.G.'s tend to maintain a steady pattern throughout their careers. White Randoms fluctuate to some extent during the first three semesters; they then proceed to achieve at a higher level than any other group.

These findings must be interpreted in the light of the retention/withdrawal rates of students within the respective subgroups. Among Black students, 11% of these students left Oberlin before graduation with inadequate grades and 1% did not progress satisfactorily over a

four to five year period. Among White E.O.G. students, 10% withdrew early with inadequate grades and 1% did not progress satisfactorily within the total time period. Among White Random Sample students, 14% left before graduation with inadequate grades and 1% did not progress satisfactorily within the total period. On the other hand, among those students who left Oberlin before graduation with "high" or "adequate grades" for transfer purposes, 3% of Black students did so; 8% of White E.O.G. students made the move; and 18% of the White Random Sample students did so. A detailed analysis will be made of those who did withdraw under both conditions to determine differential rates based on SES and/or MA profiles. We expect random influences operating in the case of withdrawals among those with inadequate grades, but not among those who withdraw with high or adequate grades.

We found that SES factors do operate in all three populations in the sense that they emerge as correlated influences upon grades at one point or another in a student's academic career (Tables 4, 5, and 6). For Blacks, the effects begin to emerge in the fifth, sixth, and seventh semesters (correlations=.382, .271, and .241, respectively). In comparison, the correlation for the first semester was .03. The correlated effects show up more rapidly for White E.O.G.'s : significant correlations between SES and grades emerge in semester three (correlation=.206). For the white random sample, a gradual, negative effect developed (.006 semester 1, -.12 semester 4, and -.193 semester 7, and -.151 semester 8). Although different background factors emerge as correlated influences at different times, these correlations are not random; definite patterns of correlations emerge for all three populations.

Among Blacks, there is a positive correlation between SES and SAT Verbal scores. On the other hand, SAT math scores are weakly correlated in a negative direction with SES. For White E.O.G.'s and White Randoms there is no clear correlated influence of SES upon SAT scores even though the SAT scores correlate positively with each other (Tables 4, 5 and 6).

Clearly, for Blacks what begins to emerge from these findings is that we have no clear handle that will allow us to predict how a student will perform in his first four semesters in school. These background factors do not correlate well with a student's initial performance in college (Table 4). This is a particularly important finding in terms of the initial screening process. The first year is the first test of the student. These background factors do not help us to predict performance at this time. The simple correlations reported here suggest that both SES and MA factors are important in the academic performance of Black and White E.O.G. and White Random Sample students at Oberlin College. The pattern of findings are not convergent among these three subgroups of students, suggesting background differences. SES influences correlate most highly and positively with grades among the White E.O.G. students. SAT verbal scores also predict well for these students. Among White Random Sample students, SES influences upon grades appear to be either non-significant or reverse in sign as SES rank increases. The best predictor in their case is the SAT mathematics score. At an early stage in their academic careers in Oberlin College, neither SES nor SAT verbal or SAT mathematics scores provide much of a handle among Black students. Beginning from the fifth semester onward, both SES and SAT verbal scores begin to predominate in positive academic performance (grades achieved).

Conclusions

These findings are of a preliminary character. They suggest that both SES and MA factors are moderately important in the academic performance of Black and White students at Oberlin College. Future analyses will involve both multiple regression and partial correlation analyses to determine the conjoint effects of a wider range of background and in-college variables on academic performance and conduct. As another approach to analysis, multi-dimensional scaling of these influences upon academic profiles of students will be made to identify stable influences on the grade profiles and other academic indicators among these students.

When compared with aggregate studies reported by Wegner and Sewell and by Stanley, the results reported here do not seem to conform to established findings for less affluent students, both Black and White, in "good liberal arts colleges." Lower SES status does not imply lowered persistence or attainment through this college among Black students. Lower SES status does not imply lowered persistence or attainment through this college for White students either. The ^{low} withdrawal rates ^{and improved academic performance over time} suggest high attainment, retention and persistence.

The results reported in this paper are subject to diverse interpretations, depending upon theoretical, methodological, and substantive considerations.

The adequacy of father's SES in describing the educational resources and liabilities associated with the student's family network in the case of Black students is of some concern. Rhile's study of Black and White student differences in the "density" and "achievement levels" of significant others suggests that Black students have a much "thinner" and "random" network of significant others than comparable White students (Rhile 1969). A high

achieving father within a Black family may or may not imply a high achieving mother and kin and friends standing by the father. The reverse also may be true. If this pattern is a likely one, SES (as an indicator of educational resources) would not predict well to academic preparation and motivation among Black students.

With regard to additional sources of lowered correlations among the data, we may be describing the top 1% of tested talent among Black students. By regular admissions standards, they may be in the lower fourth or lower fifth of the regularly admitted students at Oberlin. Nationally, however, the larger majority of these Black students are in the top fifth of all high school seniors (of students with SAT-Verbal scores of 500 and above) (College Entrance Examination Board 1969, pp. 10-11). At the least, the students between 420 and 500 are in the second fifth of all seniors in the national sample. It may be true that "only 4 percent of all high school seniors would exceed a SAT-Verbal score of 620" (Stanley 1971, p. 643). However, when Black students are compared with other Black students, the students recruited to Oberlin under the special program (plus those admitted under regular criteria) probably are more select than their white cohorts:

Kendrick infers from the Coleman report that "not more than 10 percent and perhaps as few as 10 percent of . . . Negro high school seniors would score 400 or more on the verbal section of the SAT. Only 1 or 2 percent would be likely to score 500 or more (Stanley 1971, p. 643).

Stanley goes on to note that:

Cornell may have the ablest large group of Black students in the country if SAT scores are used as the criterion. The verbal means of entering freshmen in the special program ranged from 530 to 570, whereas the means of the freshmen in the College of Arts and Sciences ranged from 660-703. . . . The lowest SAT scores for the 247 students in the special program were reported by year as 430, 340, 400, and 383 respectively. (Stanley 1971, p. 643.)

It would appear that Oberlin has had and continues to share in this top

rated group of Black students. We have the likelihood of a truncated range test scores, reducing the possibility of higher correlations (Blalock 1960, pp. 360-368; Stanley 1971, p. 642). Only an extension of the range of SAT scores downward would increase the chances of higher correlations. Policywise, selection downward into and through the 300's would be contrary to established educational policy, unless strict experimental controls were to be employed (Davis and Welty 1970). The same ^{statistical effects of the} remarks apply to White students with regard to the/limited range in SAT scores (and SES scores) upon grades.

This approach would explain why Clark and Plotkin (1963) were unable to find significant correlations between test scores and grades among Black students in integrated colleges. Working within a narrow range of able talent, no significant correlations would be expected to develop. The same remarks apply to Astin's likely findings on academic attainment and the suggestion of a random selection policy. In any case, Oberlin Black students represent the top talent among Black students in America. They should do extremely well by any standard, given initial differences in preparation. Sewell's studies cited here and Stanley's analysis suggests that such able students do persist and attain well despite financial difficulties. In retrospect, these students may not be markedly "underqualified" on the basis of Stanley's discussion and analysis. Given these differences in test scores and likely level of preparation for liberal arts studies, bench marks of hard and high attainment are required to determine if such selection criteria for Black and other minority background students should in fact be different. Experience at Oberlin suggests that these changes in selection criteria may not impair the ability of the college to develop both preparatory and enriching pacesetter arrangements necessary for high attainment among minority students.

Another paper would be required to explain the sources of differences in test scores between Black and White students (Wolfe 1971). Moreover, it is our view that such concerns misplace the crux of the problem--the effort to develop unused and latent potential and to reduce talent loss in ways which provide the best match between a student and the range of institutions within the student's intellectual reach (Yinger, Ikeda, Laycock 1970, pp. 4-6). The essential question for Oberlin and for other selective colleges is how best it can work with selected students to develop their potential to the fullest. Obviously, paramount questions remain about whether such efforts could be better served under less selective conditions. Stanley (1971) raises this question. Fair and meaningful answers lie at least in two directions--random assignment of 'high potential' students to selective and non-selective institutions with free movement in either direction as a function of student interest and skill development or a "GI Bill" approach to allowing free movement as a function of initial selection and placement on a voluntary basis. Without some pilot efforts, neither approach is in sight yet to aid both the students and the institutions of higher learning in developing matching placements.

FOOTNOTES

1. Alexander Astin, "Letters," SCIENCE, 166 (November 21), 1969.
2. Aaron Morris Bindman, "Participation of Negro Students in an Integrated University," DISSERTATION ABSTRACTS, Vol. 26, July-September, 1965, p. 535.
3. Hubert M. Blalock, SOCIAL STATISTICS, New York, McGraw-Hill, 1960.
4. Nolen E. Bradley, "The Negro Undergraduate Student: Factors Relative to Performance in Predominantly White State Colleges and Universities in Tennessee," JOURNAL OF NEGRO EDUCATION, 36 (Winter 1967), pp. 15-23.
5. Donald T. Campbell and Albert Erlebacher, "How Regression Artifacts in Quasi-Experimental Evaluations Can Mistakenly Make Compensatory Education Look Harmful," in J. Hellmuth, COMPENSATORY EDUCATION: A NATIONAL DEBATE. Vol. III of THE DISADVANTAGED CHILD, (New York: Brunner/Mazel, ms., 1-27).
6. K. B. Clark and L. Plotkin, THE NEGRO STUDENT AT INTEGRATED COLLEGES (New York: National Scholarship Service and Fund for Negro Students, 1963).
7. James S. Coleman et. al., EQUALITY OF EDUCATIONAL OPPORTUNITY (Washington: U. S. Government Printing Office, 1966).
8. YOUR COLLEGE BOARD SCORES: SCHOLASTIC APTITUDE TEST, ACHIEVEMENT TESTS, (New York: College Entrance Examination Board, 1969).
9. William G. Davis and Gordon A. Welty, "The Old System and the New College Students," Working Paper for Panel No. 39, "Admission and Orientation for the Educationally Disadvantaged," American College Personnel Association 1970, National Conference, St. Louis, Missouri.
10. Robert M. Hauser, "Schools and The Stratification Process," AMERICAN JOURNAL OF SOCIOLOGY, 74 (May 1969), pp. 587-611.
11. Margaret E. Rhile, SOCIAL CLASS, SIGNIFICANT OTHER SUPPORTS, AND ACADEMIC PERFORMANCE, unpublished M.A. thesis, Oberlin College, 1969.
12. John P. Robinson, Robert Athanasious, and Kendra B. Head, MEASURES OF OCCUPATIONAL ATTITUDES AND OCCUPATIONAL CHARACTERISTICS (Ann Arbor: Survey Research Center, Institute of Social Research, Feb. 1969), pp. 342-356.
13. William H. Sewell and Vimal P. Shah, "Socioeconomic Status, Intelligence and the Attainment of Higher Education," SOCIOLOGY OF EDUCATION, 40 (Winter): 1-23, 1967.

14. William H. Sewell, Archibald O. Haller and George W. Ohlendorf, "The Educational and Early Occupational Status Attainment Process: Replication and Revision," AMERICAN SOCIOLOGICAL REVIEW, 35 (December 1970), pp. 1014-1028.
15. Gerald Slatin, "Ecological Analysis of Delinquency: Aggregation Effects," AMERICAN SOCIOLOGICAL REVIEW 34 (December, 1969), 894-907.
16. Julian C. Stanley, "Predicting College Success of the Educationally Disadvantaged," SCIENCE, (Feb. 19, 1971,) pp. 640-647.
17. United States Department of Commerce, Bureau of the Census, CURRENT POPULATION REPORTS, Series, p-23, No. 29. "The Social and Economic Status of Negroes in the United States, 1969", p. 53.
18. Eldon L. Wegner and William H. Sewell, "Selection and Context as Factors Affecting the Probability of Graduation from Colleges," AMERICAN JOURNAL OF SOCIOLOGY, 75 (January 1970), pp. 665-679.
19. Jerome A. Wolfe, Chapter I, THE RELATIONSHIP OF SOCIOECONOMIC STATUS, RACE, AND SCHOLASTIC APTITUDE UPON ACADEMIC PERFORMANCE AT THE COLLEGE LEVEL, unpublished Ph.D. thesis, University of Cincinnati, 1971.
20. J. Milton Yinger, Kiyoshi Ikeda and Frank Laycock, SUPPORTIVE INTERVENTIONS FOR HIGHER EDUCATION AMONG STUDENTS OF DISADVANTAGED BACKGROUND, U. S. Department of Health, Education, and Welfare. Project No. 5-0703.

Figure 1

Semester Grade Point Averages of Black, White EOG, and White
Random Sample Students at Oberlin College—Classes of 1968,
1969, and 1970
(From Table 3A)

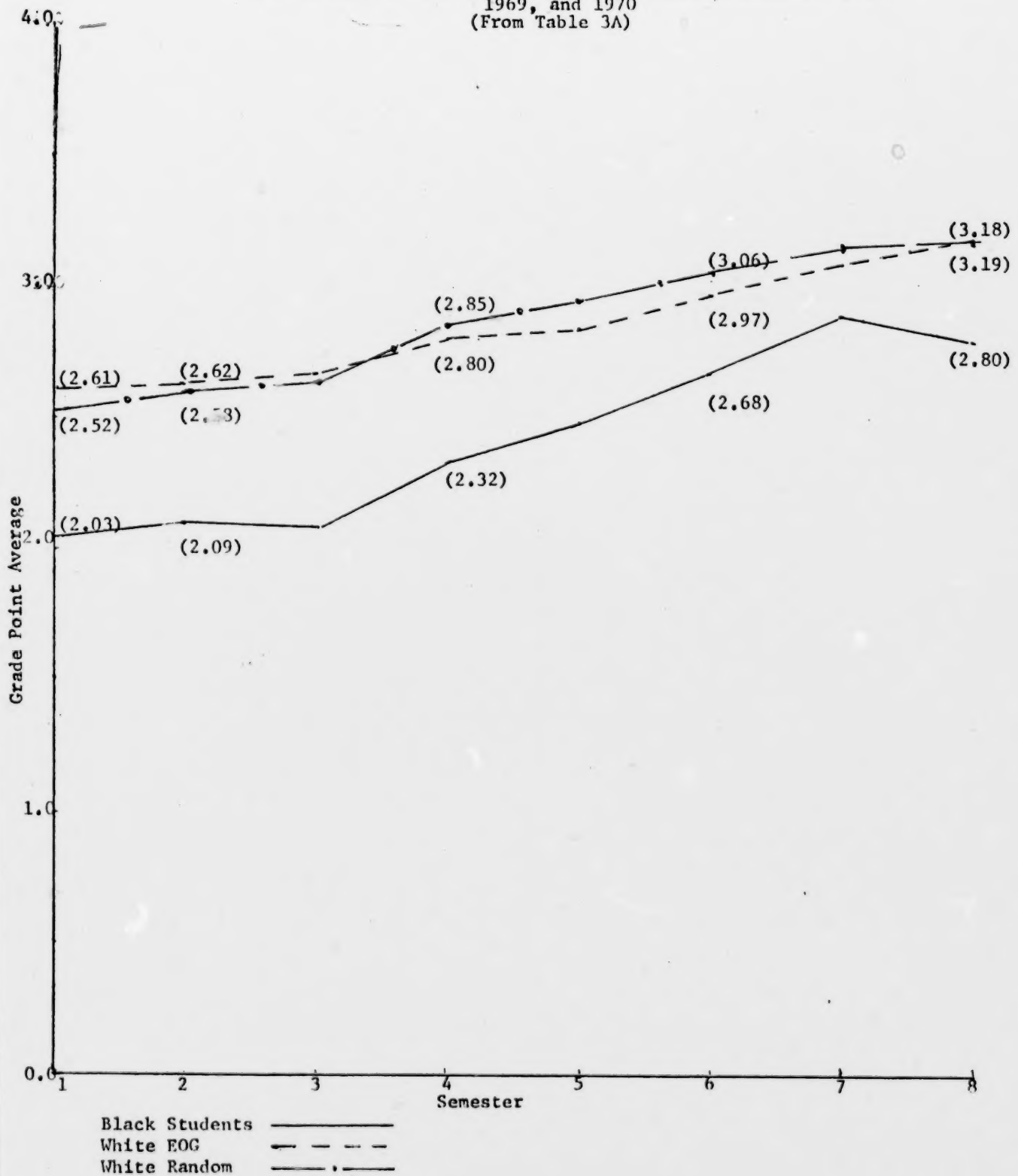


Figure 2

Cumulative Grade Point Averages of Black, White EOG, and White Random
Sample Students at Oberlin College - Classes of 1968, 1969, 1970
(From Table 3B)

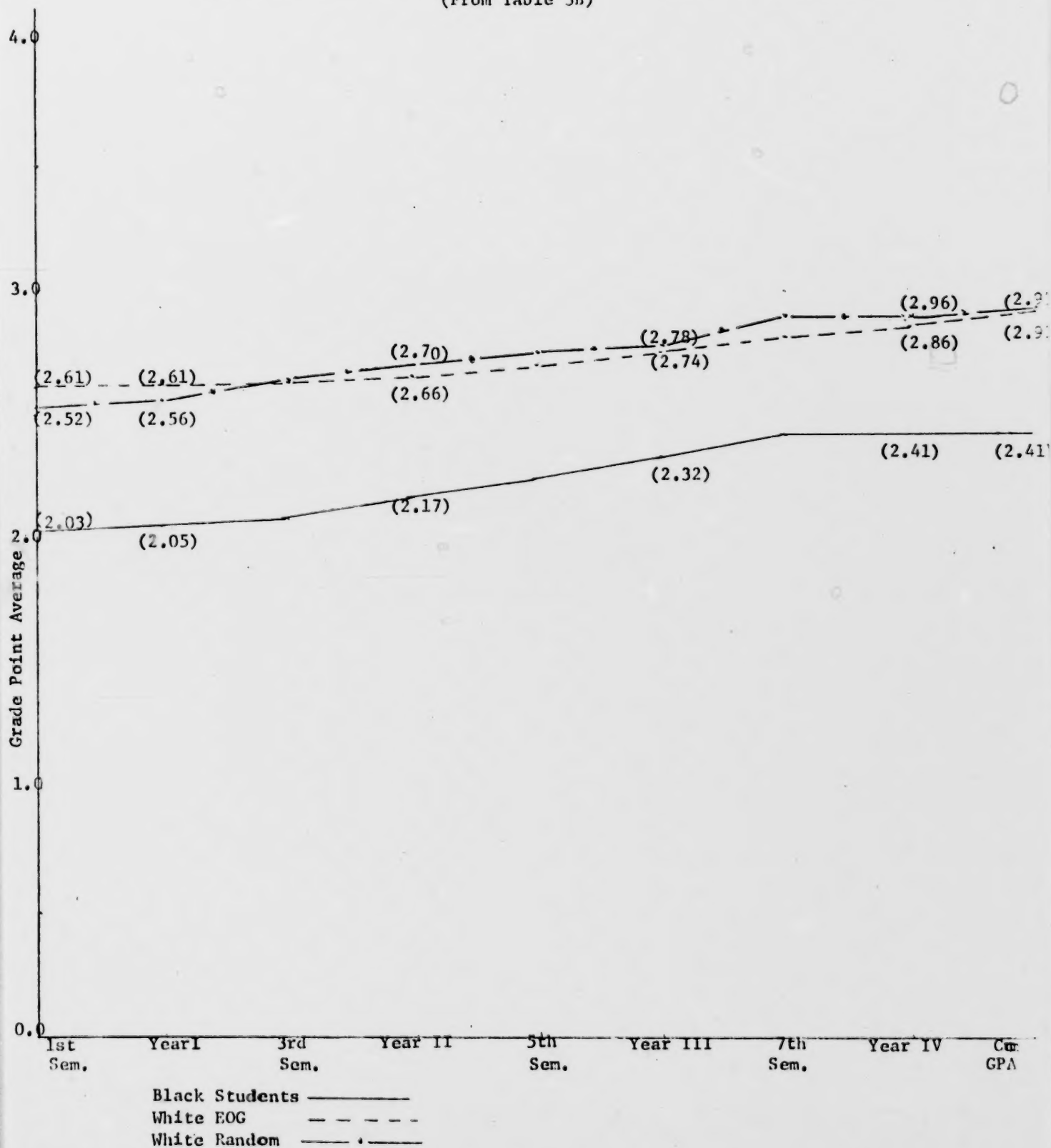


Table 1

Scholastic Aptitude Test Measures (Verbal and Mathematical) of Black Students,
White Educational Opportunity Grant Students, and White Random Sample Students--
Oberlin College Classes of 1968, 1969, 1970

SAT Score	SAT-Verbal		SAT-Mathematical			
	Black	White EOG	White Random	Black	White EOG	White Random
	(%)	(%)	(%)	(%)	(%)	(%)
750-759	-	2	2	-	10	11
700-749	4	18	25	1	21	14
650-699	7	30	19	5	26	23
600-649	18	26	40	18	14	27
550-599	28	11	18	25	16	14
500-549	18	7	6	23	6	5
450-499	14	-	2	17	6	5
400-449	7	5	-	8	1	1
350-399	4	1	-	2	-	-
300-349	-	-	-	1	-	-
Total	100	100	100	100	100	100
N	(84)	(96)	(132)	(84)	(96)	(132)
n (missing data)*	(11)	(29)	(6)	(11)	(29)	(6)

*Incomplete data are being collected on all variables in this analysis and other analyses to reduce error in description and estimation.

Mean Score	556	642	643	543	650	645
Median Score	565	655	652	546	664	649
Standard Deviation	79.5	71.6	66.0	74.1	85.3	75.8
Standard Error of Estimate	8.68	7.31	5.75	8.09	8.70	6.60
Range	358-735	393-755	464-762	342-707	402-788	417-778

Table 2

Father's Socio-Economic Status
(Duncan-Reiss Scale Scores)
Black, White Educational Opportunity Grant, and White
Random Sample Students - Oberlin College
Classes of 1968, 1969, 1970

SES Score	Black	White EOG	White Random
90-98	10	-	14
80-89	9	7	45
70-79	21	12	11
60-69	3	7	14
50-59	5	14	5
40-49	7	27	6
30-39	10	5	2
20-29	8	6	2
10-19	16	17	-
0-9	12	5	1
Total	101	100	100
N	(76)	(100)	(124)
n (missing data)	(19)	(25)	(14)
Mean Score	48.6	45.5	74.0
Median Score	44.0	47.0	80.0
Standard Deviation	30.0	22.3	17.3
Standard Error of Estimate	3.44	2.23	1.54
Range	4-96	7-86	8-96

Table 3

Means and Standard Deviations of Semester² and Cumulative Grade Point Averages of Black, White Educational Opportunity Grant, and White Random Sample Students at Oberlin College--Classes of 1968, 1969 and 1970

A. Grade Point Averages by Semester										
	1	2	3	4	5	6	7	8	9	10
Black Students										
Mean	2.03	2.09	2.08	2.32	2.49	2.68	2.89	2.80	2.79	
Standard Deviation	.59	.59	.62	.62	.53	.53	.48	.55	.29	
N	94	92	90	81	83	71	69	55	6	
White EOG Students										
Mean	2.61	2.62	2.67	2.80	2.82	2.97	3.09	3.19	2.13	3.20
Standard Deviation	.61	.63	.56	.62	.67	.58	.56	.44	.77	.47
N	125	123	123	115	104	99	100	81	12	6
White Random Sample										
Mean	2.52	2.58	2.62	2.85	2.95	3.06	3.15	3.18	3.40	
Standard Deviation	.55	.65	.67	.51	.50	.51	.44	.44	.10	
N	122	126	113	111	97	93	89	78	2	

B. Cumulative Grade Point Averages											
	Semester 1	Year I	Semester 3	Year II	Semester 5	Year III	Semester 7	Year IV	Semester 9	Year V	Cumulative Average
Black Students											
Mean	2.03	2.05	2.08	2.17	2.25	2.32	2.41	2.41	2.49		2.41
Standard Deviation	.59	.53	.47	.46	.43	.39	.38	.34	.27		.37
N	94	95	90	83	78	75	71	63	6		68
White EOG Students											
Mean	2.61	2.61	2.62	2.66	2.70	2.74	2.81	2.86	2.79	2.75	2.91
Standard Deviation	.61	.60	.56	.56	.56	.54	.48	.45	.43	.36	.43
N	125	125	123	122	114	111	103	94	14	7	101
White Random Sample Students											
Mean	2.52	2.56	2.63	2.70	2.76	2.78	2.90	2.90			2.93
Standard Deviation	.55	.56	.50	.47	.41	.48	.37	.36			.37
N	122	126	111	113	92	99	88	89			94

Correlations Among Background Variables (SES, SATV, SATM), Semester Grade Point Averages, and Cumulative Grade Point Averages among Black Students at Oberlin College-Classes of 1968, 1969 and 1970 (N=95)

[illegible]

Correlations Among Background Variables (SES, SATV, SATM), Semester Grade Point Averages, and Cumulative Grade Point Averages among White Students Eligible for Educational Opportunity Grants at Oberlin College - Classes of 1968, 1969, 1970 (N=125)

[illegible]

Correlations among Background Variables (SES, SATV, SATM), Semester Grade Point Averages, and Cumulative Grade Point Averages among White Random Sample Students--Classes of 1968, 1969, 1970 (N=138)

[illegible]